

*PH SERIES*  
**9+ SEER**

**Self-Contained  
Packaged Heat Pump  
50 HZ**

**4 and 5 Ton**

**Nominal Cooling Capacity:**  
**48,000 to 60,000 BTUH**  
**[10.6 kW to 17.6 kW]**

**Nominal Heating Capacity:**  
**48,000 to 60,000 BTUH**  
**[10.6 kW to 17.6 kW]**



*Outdoor self-contained package heat pump allows for side-by-side, ground-level or rooftop application.*

**Standard Features**

- Two-speed evaporator blower motor; low speed for normal or low-static applications, high speed for high-static applications
- Quiet-operating top condenser discharge
- Copper tube/aluminum fin coils
- Totally enclosed, permanently lubricated condenser fan motor
- Hermetically sealed compressor with internal relief valve
- Fully charged R-22 system
- Bi-flow liquid line filter drier
- Suction line accumulator
- Check-flowrator expansion device
- Crankcase heater
- High-efficiency performance
- Square to round duct converter for mobile home application
- Bottom pan rails elevate the unit above the slab

**Cabinet Construction**

- Zinc-coated enamel finish
- Fully insulated air handling compartment
- Convenient access panels

**Accessories**

- Heat Kit from 11.2 to 14.7 kW with plug-in connection
- Room Thermostat (HPT18-60)
- Outdoor Thermostat (OT18-60)
- Thermostat (CHTP18-60HD)

**Accessories (Field Supplied)**

- Roof curb
- Downflow Plenum (includes filter rack)
- Manual fresh air damper (to be used w/ Downflow Plenum)
- Economizer (to be used w/Downflow Plenum)

**Accessory Heat Kit Features**

- Primary limit protection
- Rust-resistant nickel chromium heating elements (See Electrical Data Chart)

# PRODUCT SPECIFICATIONS

## Specifications

|                              | PH048-5     | PH060-5     |
|------------------------------|-------------|-------------|
| Total Cooling—BTUH           | 48000       | 53000       |
| Sensible Cooling—BTUH        | 35500       | 38100       |
| SEER (see Note 1)            | 10.0        | 9.70        |
| Heating—BTUH @ 470 °F        | 47000       | 53000       |
| C.O.P. (470 °F)              | 3.20        | 3.00        |
| Heating—BTUH @ 170 °F        | 25400       | 28000       |
| C.O.P. (170 °F)              | 2.00        | 2.00        |
| Sound Rating (bels)          | 8.40        | 8.40        |
| <b>Indoor Blower</b>         |             |             |
| Type                         | DD          | DD          |
| Size—D x W                   | 10 x 8      | 10 x 8      |
| Motor Horsepower             | 3/4         | 3/4         |
| <b>Evaporator Coil</b>       |             |             |
| Face Area (Ft <sup>2</sup> ) | 6.22        | 6.22        |
| Fin/In.                      | 14          | 14          |
| No. of Rows                  | 3           | 3           |
| <b>Outdoor Fan</b>           |             |             |
| Fan Diameter (In.)           | 22          | 22          |
| Motor Horsepower             | 1/4         | 1/4         |
| <b>Condenser Coil</b>        |             |             |
| Face Area (Ft <sup>2</sup> ) | 16.2        | 16.2        |
| Fin/In.                      | 19          | 19          |
| No. of Rows                  | 1           | 2           |
| <b>Electrical</b>            |             |             |
| Ph                           | 3           | 3           |
| Volts                        | 380/415     | 380/415     |
| Compressor RLA               | 9.6         | 10.3        |
| Compressor LRA               | 62.0        | 62.0        |
| Indoor Blower FLA            | 2.2         | 2.2         |
| Outdoor Blower FLA           | 0.8         | 0.8         |
| Minimum Circuit Ampacity     | 15.0        | 15.9        |
| M.O.P. (see Note 2)          | 20          | 25          |
| Shipping Weight—pounds [kg]  | 387 [175.7] | 423 [192.0] |

### NOTES:

1. Per ARI 240 and 270 test standards.
2. M.O.P. (Maximum Overcurrent Protection)
3. May use fuses or HACR type Circuit Breakers of the same size as noted.

## Evaporator Blower Specifications

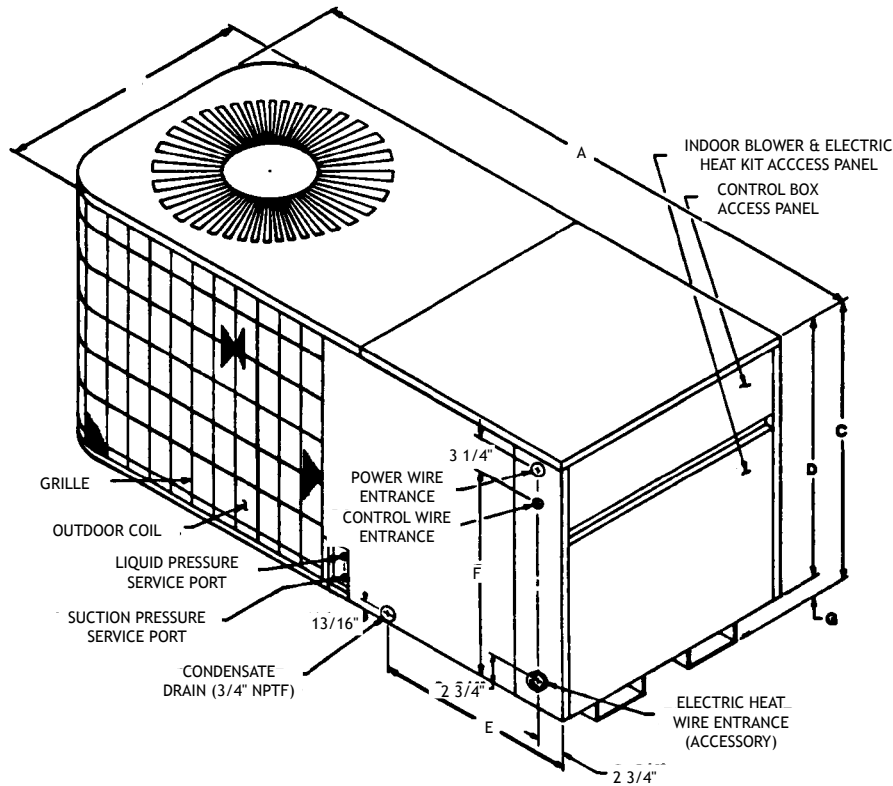
| Model              | Speed | Volts |       | E.S.P. (In. of Water) |      |      |      |      |      |      |      |      |      |
|--------------------|-------|-------|-------|-----------------------|------|------|------|------|------|------|------|------|------|
|                    |       |       |       | 0.1                   | 0.2  | 0.3  | 0.4  | 0.5  | 0.6  | 0.7  | 0.8  | 0.9  | 1.0  |
| PH048-5<br>PH060-5 | LOW   | 415   | CFM   | 1695                  | 1605 | 1565 | 1540 | 1520 | 1435 | 1395 |      |      |      |
|                    |       |       | WATTS | 590                   | 555  | 530  | 515  | 495  | 460  | 440  |      |      |      |
|                    |       | 380   | CFM   | 1560                  | 1520 | 1490 | 1465 | 1425 | 1340 | 1230 |      |      |      |
|                    |       |       | WATTS | 570                   | 535  | 510  | 490  | 460  | 410  | 370  |      |      |      |
| PH048-5<br>PH060-5 | HIGH  | 415   | CFM   | 1970                  | 1900 | 1820 | 1710 | 1610 | 1460 | 1360 | 1295 | 1160 | 1050 |
|                    |       |       | WATTS | 690                   | 650  | 600  | 560  | 510  | 470  | 440  | 410  | 380  | 360  |
|                    |       | 380   | CFM   | 1830                  | 1785 | 1720 | 1630 | 1530 | 1415 | 1290 | 1195 | 1075 | 950  |
|                    |       |       | WATTS | 620                   | 580  | 540  | 500  | 460  | 420  | 390  | 340  | 310  | 300  |

### NOTES:

1. Data shown is dry coil. Wet coil pressure drop is approx. 0.1" water.
2. Data shown does not include filter pressure drop.

# PRODUCT SPECIFICATIONS

## Dimensions



| MODEL     | A   | B   | C                                | D                                | E                                | F                                 | G                                |
|-----------|-----|-----|----------------------------------|----------------------------------|----------------------------------|-----------------------------------|----------------------------------|
| PH048/060 | 63" | 32" | 34 <sup>3</sup> / <sub>8</sub> " | 32 <sup>1</sup> / <sub>2</sub> " | 21 <sup>7</sup> / <sub>8</sub> " | 27 <sup>5</sup> / <sub>16</sub> " | 17 <sup>7</sup> / <sub>8</sub> " |

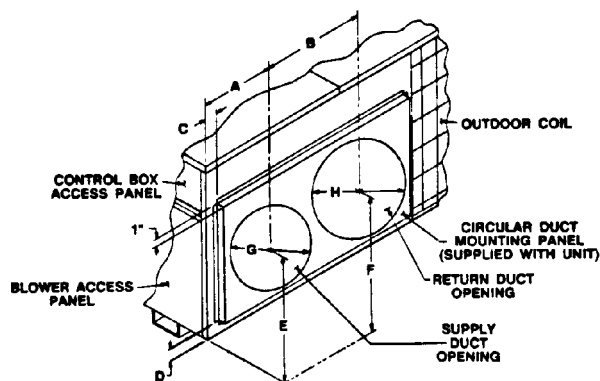
## Accessories

|                         |           |
|-------------------------|-----------|
| ROOF CURB               | PCCP42-60 |
| DOWN FLOW PLENUM        | PCP42-60  |
| MANUAL FRESH AIR DAMPER | PCMD42-60 |
| ECONOMIZER - DOWN FLOW  | PCE42-60  |
| ROOM THERMOSTAT         | CHT18-60  |

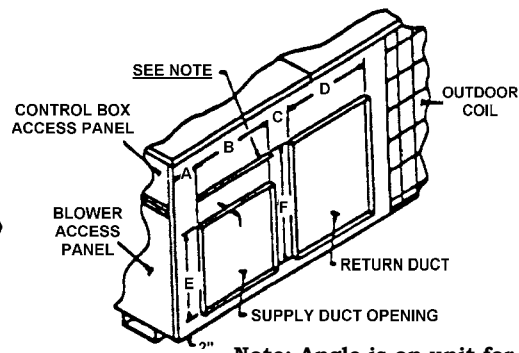
## Chassis Sizes

|                |
|----------------|
| <b>LARGE</b>   |
| PH048<br>PH060 |

NOTE - Down Flow Plenum includes Filter Rack.



UNIT WITH CIRCULAR DUCT PANEL REMOVED



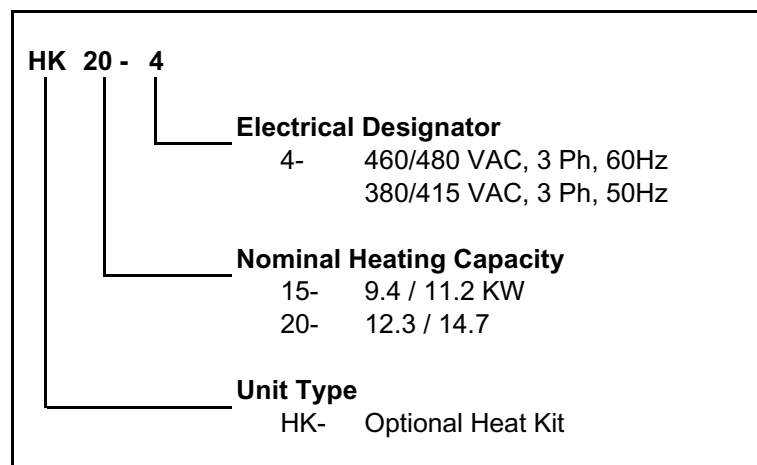
Note: Angle is on unit for the option of having the same size supply and return duct work to unit.

| MODEL     | A                                  | B   | C                               | D                                  | E                               | F                                | G   | H   |
|-----------|------------------------------------|-----|---------------------------------|------------------------------------|---------------------------------|----------------------------------|-----|-----|
| PH048/060 | 10 <sup>11</sup> / <sub>16</sub> " | 19" | 2 <sup>1</sup> / <sub>4</sub> " | 11 <sup>11</sup> / <sub>16</sub> " | 9 <sup>7</sup> / <sub>8</sub> " | 10 <sup>1</sup> / <sub>8</sub> " | 14" | 14" |

| MODEL     | A                               | B   | C  | D   | E   | F                                 |
|-----------|---------------------------------|-----|----|-----|-----|-----------------------------------|
| PH048/060 | 3 <sup>3</sup> / <sub>4</sub> " | 14" | 5" | 14" | 14" | 11 <sup>1</sup> / <sub>16</sub> " |

# PRODUCT SPECIFICATIONS

## Heat Kit Model Identification



## Heat Kit Selection

|        | PH048-5 | PH060-5 |
|--------|---------|---------|
| HK15-4 | X       | X       |
| HK20-4 | X       | X       |

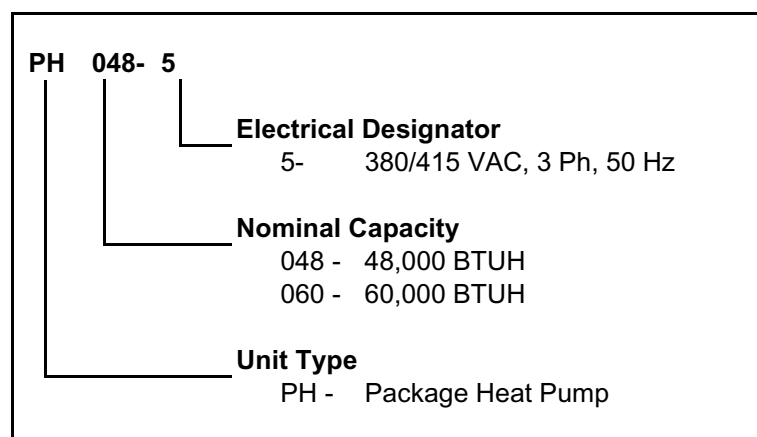
## Heat Kit Electrical Data

| Model    | Nominal kW | Minimum Ampacity<br>380- / 415V | Maximum Overcurrent Protection<br>380 / 415V |
|----------|------------|---------------------------------|--|
| HK15 - 4 | 9.4/11.2   | 15/16                           | 20/20  |
| HK14 - 4 | 12.3/14.7  | 19/21                           | 30/30  |

## KW Correction Factor for 3-Phase Heat Kit

| Supply Voltage     | 415  | 410  | 400  | 390  | 380  |
|--------------------|------|------|------|------|------|
| Correction Voltage | 1.00 | 0.98 | 0.93 | 0.88 | 0.84 |

## Model Identification



(ALL UNITS ARE DIRECT DRIVE)

## Quality Makes the Difference!

All of our systems are designed and manufactured with the same high-quality standards, regardless of size or efficiency. We have designed these units to significantly reduce the most frequent causes of product failure. They are simple to service and forgiving to operate. We use quality materials and components. Finally, every unit is run-tested before it leaves the factory. That's why we know...there's no better quality.

Visit our web site at  
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